RD28305-2

IN THE CLAIMS

1. (Original) A method for creating a combinatorial coating library, comprising:

selectively depositing at least one of a plurality of materials suitable for forming at least one coating layer on a surface of one or more substrates;

selectively applying at least one of a plurality of curing environments to each of a plurality of regions associated with the at least one coating layer using a scanning mirror system having a mirrored surface positionable relative to an incoming radiation beam, wherein the mirrored surface is positionable to direct the incoming radiation beam to a selected one of the plurality of regions associated with the coating layer; and

wherein the combinatorial coating library comprises a predetermined combination of at least one of the plurality of materials and at least one of the plurality of curing environments associated with each of the plurality of regions.

2. (Original) The method of claim 1, wherein applying at least one of the plurality of curing environments to each of the plurality of regions associated with the at least one coating layer further comprises applying substantially the same predetermined one of the plurality of curing environments to each of the one or more substrates.

3. (Previously Presented) The method of claim 1, wherein applying at least one of the plurality of curing environments to each of the plurality of regions associated with the at least one coating layer further comprises applying a substantially different predetermined curing environment to each of the one or more substrates.

4. (Original) The method of claim 1, further comprising controlling which of the plurality of regions associated with the at least one coating layer on the surface of the one or more substrates are exposed to the at least one of the plurality of curing environments.

5. (Original) The method of claim 1, wherein the plurality of materials further comprise a material selected from the group consisting of polymeric materials, oligomeric materials, and small molecules.

6. (Original) The method of claim 1, wherein selectively depositing at least one of the plurality of materials on a surface of one or more substrates further comprises selectively depositing at least one of the plurality of materials using a coating system selected from the group consisting of a spray/vapor coating system, spin coating system, dip coating system, flow coating system, and draw-down coating system.

7. (Original) A method for creating a combinatorial coating library, comprising:

selectively depositing at least one of a plurality of materials suitable for forming at least one coating layer on a surface of one or more substrates;

selectively applying at least one of a plurality of curing environments to each of a plurality of regions associated with the at least one coating layer using a scanning mirror system having a mirrored surface positionable relative to an incoming radiation beam, wherein the mirrored surface is positionable to direct the incoming radiation beam to a selected one of the plurality of regions associated with the coating layer;

controlling which of the plurality of regions associated with the at least one coating layer on the surface of the one or more substrates are exposed to the at least one of the plurality of curing environments; and

wherein the combinatorial coating library comprises a predetermined combination of at least one of the plurality of materials and at least one of the plurality of curing environments associated with each of the plurality of regions.

8. (Original) The method of claim 7, wherein applying at least one of the plurality of curing environments to each of the plurality of regions associated with the at least one coating layer further comprises applying substantially the same predetermined one of the plurality of curing environments to each of the one or more substrates.

9. (Previously Presented) The method of claim 7, wherein applying at least one of the plurality of curing environments to each of the plurality of regions associated with the at least one coating layer further comprises applying a substantially different predetermined curing environment to each of the one or more substrates.

10. (Original) The method of claim 7, wherein the plurality of materials further comprise a material selected from the group consisting of polymeric materials, oligomeric materials, and small molecules.

11. (Original) The method of claim 7, wherein selectively depositing at least one of the plurality of materials on a surface of one or more substrates further comprises selectively depositing at least one of the plurality of materials using a coating system selected from the group consisting of a spray/vapor coating system, spin coating system, dip coating system, flow coating system, and draw-down coating system.